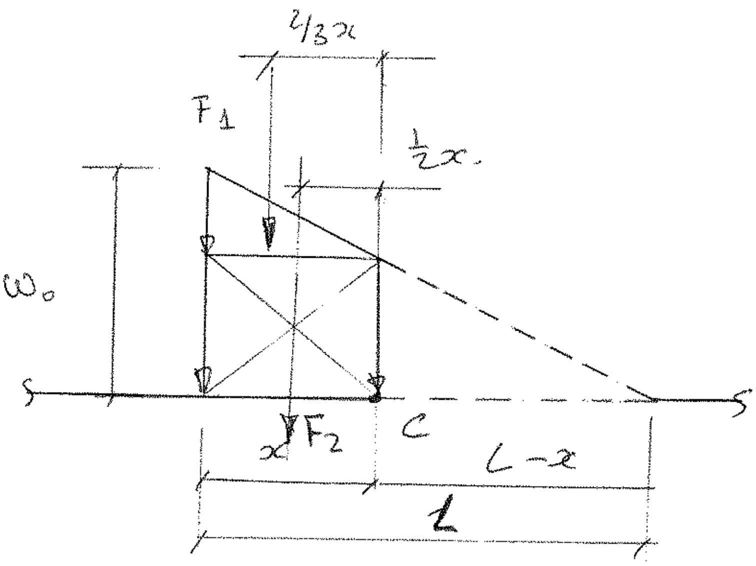
DRIEHOEKBELASTING



$$\frac{y}{L-x} = \frac{w_0}{L}$$

$$y = \frac{w_0}{L}(L-x)$$

$$F_1 \ \tfrac{1}{2}x(w_0 - y)$$

$$F_1 = \tfrac{1}{2}x\left[w_0 - \frac{w_0}{L}(L-x)\right]$$

$$F_1 = \frac{1}{2}x\left[w_0 - w_0 L - \frac{w_0}{L}x\right]$$

$$F_1 = \frac{w_0}{2L}x^2$$

$$F_2 = xy = x\left[\frac{w_0}{L}(L-x)\right]$$

$$F_2 = \frac{w_0}{L}(Lx - x^2)$$

$$V = -F_1 - F_2 = -\frac{w_0}{2L}x^2 - \frac{w_0}{L}(Lx - x^2)$$

$$V = -\frac{w_0}{2L}x^2 - w_0 x + \frac{w_0}{L}x^2$$

$$V = \frac{w_0}{2L}x^2 + \frac{w_0}{6L}x^3$$

$$M = -\tfrac{2}{3}xF_1 - \tfrac{1}{2}xF_2$$

$$M = -\frac{2}{3}x\left(\frac{w_0}{2L}x^2\right) - \frac{1}{2}x\left[\frac{w_0}{L}(Lx - x^2)\right]$$

$$M = -\frac{w_0}{3L}x^3 - \frac{w_0}{2}x^2 + \frac{w_0}{2L}x^3$$

$$M = -\frac{w_0}{2}x^2 + \frac{w_0}{6L}x^3$$